Parks Service response to TECS Scrutiny Panel request for information (10 August 2023)

The steps the council is currently taking to reduce and minimise the use of pesticides

Table showing reduction in glyphosate use since 2017, whilst the service has transitioned to a fully in-house service. Table data needs to be read in conjunction with the accompanying notes:

Year	Glyphosate used by in-house team, in litres	Estimated total used - in-house and contracted service, in litres
2017	70	100-110 (West, cemeteries and golf externally provided)
2018	80	100-110 (West, cemeteries and golf externally provided)
2019	60	90-100 (West, cemeteries and golf externally provided)
2020	80	80 (golf externally provided)
2021	75	75 (all services transferred to in-house)
2022	55	55 (all services transferred to in-house)
2023	50*	50* (all services transferred to in-house)

Parks usage figures for 2017-2019 represent the grounds maintenance operations carried out by the newly established in-house team that covered the north, east and south areas of the city. These figures did not include any usage by the external contractors for the west, cemeteries, schools (under Traded Services) and golf course. We do not have a benchmark figure for these, but based on current applications, an estimate has been provided of the total used across all sites by both in-house and externally contracted services).

In 2020, the west, cemetery and schools maintenance also transferred in-house and in 2021 the golf course maintenance transferred in-house. Therefore the in-house usage figures shown for 2020 and 2021, although higher than 2019, actually represented a continued reduction in overall use for all maintained areas and estimated to be a 25-30% reduction overall in those years.

Since 2021, usage has continued to reduce through the adoption of alternative measures and maintenance practices.

It is estimated that total usage in 2017 was between 100-110 litres of glyphosate and the usage for 2023 is estimated to be 50 litres (* as this report is in-year) and therefore there has been a 50-55% reduction in use of glyphosate by the Parks Team in the last 6 years.

Other pesticides used:

- approx. 20 litres of a selective herbicide is used annually at Great Salterns golf course and on fine turf sports areas (bowls and cricket)
- approx. 1.5 litres of fungicide is used annually at Great Salterns golf course

The draft Parks and Open Spaces Strategy sets out the current provision as follows:

Typology	Area in Hectares	Area in m2
Amenity greenspace	81.89	818,900
Public parks and gardens	137.64	1,376,400
Natural and semi-natural greenspace	344.94	3,449,400
Play areas + provision for young people	4.15	41,500
Allotments	27.86	278,600
Cemeteries and church grounds	41.09	410,900
Outdoor sports grounds	141.79	1,417,900

There are a range of maintenance approaches adopted to each of the land types, with the Parks Team ground maintenance function carried out by 55 permanent staff supported by seasonal and casual staff. In addition, there are 4 Countryside Officers overseeing dedicated management of the city's more natural areas.

It is not possible to breakdown the amount of glyphosate used within each typology, although natural greenspace can be excluded since herbicide is not applied to this type of area (except for treating invasive species). Parks records show the following areas are identified for weed control:

Hard Surface Areas	53,541 m^2 (with additional 19,387 m^2 in schools)
Hard Surface Linear	14,037 lin m (with additional 9,426 lin. m in schools)
Shrub Bed Weed Control	89,336 m^2
Grave Top Maintenance	4,596 graves

These represent the total area and linear measurements in amenity greenspace, public parks and gardens, play areas and allotments that are identified as needing some form of weed control, albeit these will be targeted treatments and where weeds exist, not preventative treatments across the whole area.

How has the reduction been achieved?

The following measures have been implemented to achieve the 50-55% reduction in use since 2017:

- restricting use to a minimum - reduction in treatments carried out annually (most areas only treated once per year) and targeted treatments only
- selective herbicides are now only used on maintaining quality of selected sports facilities (golf course, mini-golf, bowling greens and cricket)
- increased use of woodchip derived from council tree works as a weed suppressant
- overplanting / gapping up in beds to reduce areas for weed growth to establish
- reduced mowing regimes to create or increase environmental areas in parks and around tree bases
- manual weed removal where small areas are being treated

What is the target reduction by 2025?

If operating within current staffing and financial resources, the Parks Team expect to achieve a further 20% reduction in the use of glyphosate by 2025.

Glyphosate product is typically supplied with concentration rates of 360g/l and 490g/l. The team will trial more diluted application rates where the product is still used, towards achieving the projected reduction and establish whether a greater reduction is feasible.

What are the exceptions?

The council has a responsibility to control the spread of any Japanese Knotweed identified on its land and the Parks Team currently use an external specialist to treat identified sites using glyphosate.

A selective herbicide is required to maintain the tees, fairways and greens at Great Salterns golf course, greens at Southsea mini-golf, the bowling greens at Milton Park and cricket tables at Langstone, Rugby Camp, Drayton and Farlington. A fungicide is required to maintain the fine turf on golf greens and bowling greens in order to maintain a surface to the required standard.

Trials of alternative methods of weed removal

The Parks Team undertook a trial of some alternative methods of weed control between March and August this year within Kingston Cemetery and the draft report is appended.

The trail evaluated the hot foam thermal treatment, glyphosate, pelargonic acid, acetic acid, wire weed brush and hand weeding, recording observations of the resource required (staff and equipment), time taken for treatment and any issues associated to the method. The results of the effectiveness of the treatment are photographically recorded.

The trial unsurprisingly concludes that glyphosate remains the most economic and effective form of weed control. However, it has confirmed the teams understanding of the practicality and effectiveness of the alternatives and this is summarised within the report conclusions.

What more can be done and by when?

The purpose of the trial was to give the team a greater understanding of the preferred approach for weed management if to stop, or significantly reduce, the use of glyphosate beyond that already being achieved.

If additional financial resource were made available to support this transition, the team's recommended approach is the addition of dedicated operatives and vehicles adopting an integrated approach, using a combination of manual tools, wire brush / sweeper and strimmers as the alternative treatment to applying herbicide. If this approach were adopted, it is suggested the following be monitored in the subsequent 12 - 24 month period:

- the weed management method employed per site / area treated
- record any site where herbicide is still required and the reasons why (inc. invasive species)
- public / school feedback from a change to this approach and the standards attained
- record of condition of a selection of public spaces

Since the trial has established none of the alternative treatments are as effective as applying herbicide (glyphosate), requiring more treatments per year if to be maintained to the same standard, it is almost inevitable there will be some visual impact and public response to a change in approach.

There are two levels of resource that, with best-estimate at this time, are predicted to deliver two-levels of service and the perceived change in standard of maintenance:

2-operative team, van hire and tools - £72,124 [1]

Anticipated outcome:
minimum 1 visit to each site for weed management per annum
re-growth will not be treated
substantial reduction in the effectiveness of weed management
visible reduction in standards / evidence of weeds in public areas

4-operative team, van hire and tools - £144,248 [1]

Anticipated outcome:
1-2 visits to each site for weed management per annum
repeat treatments prioritised to selected sites
reduction in the effectiveness of weed management
some reduction in standards / evidence of weeds in some areas

[1] Figures based on labour being Band 3, spinal point 4 operatives, current van hire rates, the uniform, tools and machinery required and based on each operative covering an area of approx. 50m^2 per hour. All subject to the recruitment and retention of suitably qualified staff. Staff deployment based on current site task schedule and at discretion of grounds maintenance supervisor.

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